

IN THE DRAWINGS

The examiner objected to the drawings stating Fig. 22A was vague. The Applicant respectfully submits that the amendments to the specification, discussed below, eliminate any vagueness previously present in the drawings and respectfully requests withdrawal of the objection.

REMARKS

Reconsideration of this application as amended is respectfully requested.

Claims 1-42 are pending. No claims have been cancelled.

The Examiner objected to the drawings. The applicants have amended the specification to remove any imprecision and vagueness associated with the drawings. The Applicants further submit that no new matter has been added by the amendment. The amendment to the specification is supported by the application and claims, as originally filed. More specifically, the amendment is supported by original claim 15 which states "the context model generating an address to access a bit in the first memory; and comparing the address with a counter value for the bitplane associated with the bit to determine if the bit is data that is not to be used by the context model." Therefore, the applicants respectfully request the examiner withdraw the objections to the drawings.

Claims 1, 3, 13, 18, 21, 22, 24, 34, 39, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,606,416 by Yip et al. (hereinafter "Yip") in view of U.S. Patent Number 5,999,634 by Abbott et al. (hereinafter "Abbott") and U.S. Patent Number 6,088,395 by Wang et al. (hereinafter "Wang").

Yip discloses using a tree data structure to store image data down to pixel level and an encoder that uses the data within the tree to reconstruct the image from the data stored in the tree (Yip, column 4, lines 45-67 and column 9, line 60

to column 10, line 23). As a result, the tree data structure is used to store all of the bitplane data for the image.

Wang, on the other hand, discusses a system of automatically truncating a fixed number of least significant bits from a bitplane to compress an image (Wang, column 2, lines 60-66). Wang does this to effectuate a sequence of compressed video images that allow the images to be compared to one another which aid in reconstituting the image. (Wang, column 5, lines 5-14).

Finally, Abbott describes a system for tracking the changes of a tile of an image, where the image is composed of tiles, in successive images to determine if the image is changing (Abbott, column 7, lines 25-44). To achieve this, pointers point to a data structure that characterizes the instantaneous image in a tile, where the pointers are generated by changes in a pixel. (Abbott, column 6, lines 6-8) This characterization is then updated and used to determine the activity level of an image and whether the overall image is changing.

The examiner argued that "Abbott expressly disclosed the use of a pointer into a row of memory where a datum of interests ... is stored. Clearly, since a predetermined number of the least significant bit planes have been truncated, they are not stored after the indicated location in the corresponding memory row" (Office Action, page 3, paragraph 5.1). According to the Examiner's argument, Wang eliminates a predetermined number of least significant bits (LSBs) while Abbott would allow Wang to point to the location where the more significant bits have started to be stored (Office Action, page 8, first paragraph).

Consequently, the Examiner's argument would conclude that Yip and Wang, when combined with Abbott, would point to a fixed location since the number of least significant bits is predetermined and only those bits more significant would be stored (Office Action, page 8, second paragraph).

However, one skilled in the art would not be motivated to combine Yip, Wang, and Abbott because Yip and Wang are from a different area unrelated to Abbott. Yip and Wang disclose methods for compressing and decompressing digital images, as discussed above. However, Abbott discloses a method for tracking changes in an image. Furthermore, Abbott fails to disclose or even suggest the idea of digital image compression. Rather Abbott addresses the problem of tracking uncompressed real time video images whereas Yip and Wang address the problem of efficient digital video compression. At the same time, the presently claimed invention addressed the problem of reducing the size of memory needed to store bitplanes of coefficients generated from applying a wavelet transform. Neither Yip, Wang, nor Abbott is directed to this problem and thus, applicant respectfully submits that in view of the above, one skilled in the art would not look to combine the teachings of Yip, Wang and Abbott as set forth by the Examiner.

Furthermore, the applicants respectfully submit that Abbott should not be classified as prior art under 35 U.S.C. 103(a) because Abbott is not reasonably pertinent to the problem addressed by the Applicant's invention. As noted above, the Applicant's invention addresses the problem of reducing the size of

memory needed to store bitplanes of coefficients generated from applying a wavelet transform. Thus the problem addressed by the Applicants invention involves image compression using wavelet transforms. Abbott, however, addresses the problem of tracking changes in a surveillance image through the use of data pointer generation (Abbott, abstract and column 1, lines 31-40). Further the pointers generated by Abbott point to changes in pairs of pixels which indicate whether an image is active. One skilled in the art would not find tracking the activity of pairs of pixels logically relevant to reducing memory usage for the storing of bitplanes. Additionally, Abbott is not logically relevant to Yip and Wang for at least the same reasons that Abbott is not relevant to the problem addressed by the Applicant's invention.

In fact, the purpose of Abbott is not related to image compression, reducing memory usage, or wavelet transforms. Rather, Abbott is simply interested in distinguishing real activity in an image with image noise representing false image activity. Thus Abbott is not related logically or concretely to the pertinent problems addressed by the Applicants invention. Consequently, a person of ordinary skill in the art would not be motivated to consider Abbott, nor would he be motivated to combine Abbott with Yip and Wang.

Therefore, the Applicant respectfully submits that the information as claimed is not obvious in view of a combination of Yip, Wang and Abbott.

Claims 2 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22, 24, 34, 39, 42 above and further in view of U.S. Patent Number 6,266,450 by Yip et al. (hereinafter "Yip 2").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Yip 2.

Claims 4 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22, 24, 34, 39, 42 above and further in view of U.S. Patent Number 6,005,901 by Linz (hereinafter "Linz").

For the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Linz.

Claims 5 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, Wang, and Linz as applied to claims 4 and 25 above, and further in view of U.S. Patent Number 6,275,531 by Li (hereinafter "Li").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Li.

Claims 6, 8, 27, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22,

24, 34, 39, 42 above and further in view of U.S. Patent Number 6,442,302 by Klassen (hereinafter "Klassen").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Klassen.

Claims 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, Wang, and Klassen as applied to claims 6, 8, 27 and 29 above and further in view of Yip 2.

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Yip 2.

Claims 9-12 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, Wang, and Klassen as applied to claims 6, 8, 27, and 29 above and further in view of U.S. Patent Number 5,381,145 by Allen et al. (hereinafter "Allen").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Allen.

Claims 14, 15, 17, 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22, 24, 34, 39, and 42 above and further in view of U.S. Patent Number 6,658,159 by Taubman (hereinafter "Taubman").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Taubman.

Claims 19 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22, 24, 34, 39, and 42 above and further in view of U.S. Patent Number 5,303,200 by Elrod et al. (hereinafter "Elrod").

For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Elrod.

Claims 20 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, Abbott, and Wang as applied to claims 1, 3, 13, 18, 21, 22, 24, 34, 39, and 42 above and further in view of U.S. Patent Number 6,549,673 by Ammicht et al. (hereinafter "Ammicht").


For at least the same reasons given above with respect to Claim 1, Applicant respectfully submits that the present invention is not obvious in view of a combination of Yip, Abbot and Wang and further in view of Ammicht.

In view of the foregoing, Applicant respectfully submits that applicable rejections and objections have been overcome.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,
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